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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/701,634	12/01/2000	Makoto Miyazawa	Q61929	8039

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Sughrue Mion Zinn Macpeak & Seas
2100 Pennsylvania Avenue N W
Washington, DC 20037-3213

EXAMINER

MARKHAM, WESLEY D

ART UNIT	PAPER NUMBER
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1762

DATE MAILED: 12/04/2001

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/701,634

Applicant(s)

MIYAZAWA, MAKOTO

Examiner

Wesley D Markham

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 September 2001.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 28 September 2001 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Acknowledgement is made of applicant's amendment A, filed as paper #7 on September 28, 2001, in which Claims 1 – 3, 6, and 8 were amended. Claims 1 – 10 are currently pending in U.S. application serial # 09/701,634, and an Office Action on the merits follows.

Drawings

1. The proposed drawing correction and/or the proposed substitute sheets of drawings, filed on 9/28/2001 as paper #6, have been approved. This proposed drawing correction designated Figure 5 by a legend such as ---Prior Art---.
2. The Patent and Trademark Office no longer makes drawing changes. See 1017 O.G. 4. It is applicant's responsibility to ensure that the drawings are corrected. Corrections must be made in accordance with the instructions below.

INFORMATION ON HOW TO EFFECT DRAWING CHANGES

1. Correction of Informalities -- 37 CFR 1.85

New formal drawings must be filed with the changes incorporated therein. Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and centered within the top margin. If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings **MUST** be filed within the **THREE MONTH** shortened statutory period set for reply in the Notice of Allowability. Extensions of time may NOT be obtained under the provisions of 37 CFR 1.136(a) or (b) for filing the corrected drawings after the mailing of a Notice of Allowability. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.

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2. Corrections other than Informalities Noted by Draftsperson on form PTO-948.

All changes to the drawings, other than informalities noted by the Draftsperson, **MUST** be made in the same manner as above except that, normally, a highlighted (preferably red ink) sketch of the changes to be incorporated into the new drawings **MUST** be approved by the examiner before the application will be allowed. No changes will be permitted to be made, other than correction of informalities, unless the examiner has approved the proposed changes.

Timing of Corrections

Applicant is required to submit acceptable corrected drawings within the time period set in the Office action. See 37 CFR 1.185(a). Failure to take corrective action within the set (or extended) period will result in **ABANDONMENT** of the application.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- 4. Claims 3 and 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**
- 5. Specifically, the phrases, "said edging mark is an edging line forming a shape slightly larger than and having the same shape as the inner peripheral edge of an opening of a spectacle frame" in Claim 3 and "said edging line having a shape slightly larger than and having the same shape as a peripheral edge of an opening of the spectacle frame" in Claim 8 are vague and indefinite. In particular, it is**

unclear what range of sizes of the edging line is encompassed by the phrase "slightly larger than" in Claims 3 and 8 (i.e., how much larger is "slightly larger"?).

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that formed the basis for the rejections under this section made in the previous Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. The rejection of Claims 1 and 4 – 5 under 35 U.S.C. 102(b) as being anticipated by Kato (JP 09-99444 A), set forth in paragraphs 6 – 9 of the previous Office Action, and the rejection of Claims 6 and 9 under 35 U.S.C. 102(a) as being anticipated by Yasushi et al. (JP 10-282459 A), set forth in paragraphs 10 – 12 in the previous Office Action, are withdrawn in light of applicant's amendment to the claims and corresponding arguments.
8. Specifically, regarding Claims 1 and 4 – 5, the applicant argues that Kato does not teach providing an edging mark indicating the region of the lens remaining after an edging step matched with an inner peripheral edge of openings of a spectacle frame, as required by amended independent Claim 1. The examiner agrees that Kato does not teach this limitation.

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9. Regarding Claims 6 and 9, the applicant argues that Yasushi et al. do not teach that their lens processing system comprises a computer for calculating the shape of an edging line indicating the region of the lens remaining after edging matched with the inner peripheral openings of a spectacle frame or a marking apparatus for depicting the edging line on a surface of the spectacle lens in a region to be cut off by edging, as required by amended independent Claim 6. The examiner agrees that Yasushi et al. do not teach these limitations.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 1 – 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kato (JP 09-99444 A) in view of Logan et al. (USPN 4,711,035) in further view of Wood et al. (USPN 5,053,971).
12. Regarding Claim 1, Kato teaches the general method of producing a spectacle lens which comprises a marking step of depicting production information of the spectacle lens in a region of the surface of the spectacle lens to be cut off by edging. Specifically, Kato teaches providing reference marks in the unfinished lens's outer periphery to be cut off by edging (Solution and Figure 1). Kato does not explicitly

teach (1) a step of receiving spectacle frame information, (2) a step of marking an edging mark on the lens indicating a region of the lens to remain after edging, the marking step being based on the aforementioned spectacle frame information, and (3) providing the aforementioned edging mark in a region to be cut off by edging.

However, as previously noted, it is the clear intention of Kato to produce a spectacle lens (Title) by cutting the unfinished lens to a "predetermined lens diameter"

(Solution). Kato is silent as to how the lens is cut to the desired diameter. Logan et al. teach that the optical industry generally produces a pattern having the size and shape of a lens opening in an eyeglass frame for use as a guide in an edge grinding and contouring apparatus to peripherally edge grind the optical lens to the size and shape of the lens opening. The shape of the lens opening is transferred to the surface of the lens blank by tracing the outline of the inner periphery of the lens opening with a marker. The blank is then cut following the outline on the blank surface to form a pattern corresponding to the associated traced lens opening (Col.1, lines 15 – 30). Therefore, Logan et al. teach (1) a step of receiving spectacle frame information, and (2) a step of marking an edging mark on the lens indicating a region of the lens to remain after edging, the marking step being based on the aforementioned spectacle frame information. It would have been obvious to one of ordinary skill in the art to utilize the marking / cutting method taught by Logan et al. in order to cut the unfinished lens of Kato et al. to its desired size and shape with the reasonable expectation of success (i.e., successfully cutting the lens of Kato to its desired finished diameter), as Logan et al. teach that this method is a method

generally used in the art for cutting spectacle lenses to fit a spectacle frame. Logan et al. do not explicitly teach that this edging line is marked in a region to be cut off by edging. However, Kato desires to provide marks on the surface of the unfinished spectacle lens in a region that is later cut off. Therefore, the marks are not present at the time of lens delivery (Solution). Wood et al. teach that it is known to map the surface of a lens at a slightly greater radius than the desired finished edge of the lens in order to avoid creating scratches on the surface of the lens (Col.8, lines 1 – 5). Based on these teachings, it would have been obvious to one of ordinary skill in the art to provide the edging line of Logan et al. at a slightly larger diameter than the desired finished lens diameter (i.e., provide the edging line in a region to be cut off by edging) with the reasonable expectation of successfully producing a finished spectacle lens that does not have marks present on the lens at the time of lens delivery as desired by Kato.

13. The combination of Kato, Logan et al., and Wood et al. teach all the limitations of Claims 2 – 5 as set forth above in paragraph 12 and below, including a method wherein / further comprising:

- Claim 2 – The production information includes an edging line indicating the region of the lens remaining after an edging step (see paragraph 12 above).
- Claim 3 – The edging line forms a shape larger than and having the same shape as the inner peripheral edge of an opening of a spectacle frame

(see paragraph 12 above, Logan et al., Col.1, lines 15 – 30, and Wood et al., Col.8, lines 1 – 5).

- Claim 4 – The production information includes reference position marks indicating the vertical direction of the spectacle lens (Solution and Figure 1 of Kato).
- Claim 5 – An edging step for carrying out the edging after the marking step is performed. Specifically, Kato teaches that the lens is cut (i.e., edged) to a predetermined diameter so that the marks are not present at the time of lens delivery (Solution of Kato).

14. Applicant's arguments filed on 9/28/2001 have been fully considered but they are not persuasive.
15. First, the applicant argues that the edging line of Logan et al. is not the same as the edging line of the applicant's invention. Specifically, the applicant notes that the edging line of the instant invention is located on a portion of the surface of the spectacle lens to be cut off by edging. However, the applicant also notes in their remarks that the edging line in Logan et al. "is the outline to be cut off" (page 5, paragraph 3). Therefore, it is unclear how the edging line in Logan et al. is different from the edging line of the applicant's invention, as both are to be cut off by edging. However, even if Logan et al. do not explicitly teach that the edging line is in a region to be later cut off by edging, it would have been obvious to one of ordinary skill in the art to mark the edging line in a region to be later cut off by edging for the reasons set forth in paragraph 12 above.

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16. Second, the applicant argues that, while Wood et al. teach mapping the periphery of a lens to be edged at a slightly larger radius than the edge of the finished lens, Wood et al. do not teach marking the edging line. In response, the examiner has not relied upon the teaching of Wood et al. to show that an edging line is marked on the lens. The examiner has relied upon Logan et al. for this teaching as set forth in paragraph 12 above.
17. Claims 6 – 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoya Corp. (JP 2507643 Y2) in view of Yasushi et al. (JP 10-282459 A) in further view of Wood et al. (USPN 5,053,971) in further view of Logan et al. (USPN 4,711,035).
18. The combination of Hoya Corp. and Yasushi et al. teach all the limitations of Claim 6 as set forth in paragraph 19 of the previous Office Action, except (1) a lens processing system comprising a computer for calculating the shape of an edging line on the basis of spectacle frame information, and (2) a marking apparatus that is capable of marking an edging line on a surface of the spectacle lens to be cut off by edging on the basis of reference position information. However, it is the intention of Hoya Corp. to produce a spectacle lens having the appropriate size to fit into an eyeglass frame (See Figure 8, especially reference number (8), which shows an imaged line corresponding to an eyeglass frame opening, as verified by an oral translation from a USPTO translator). Hoya Corp. is silent as to how the finished lens is produced (i.e., how it is edged). Wood et al. teach using a computer to calculate / map the peripheral shape of a lens prior to cutting based on spectacle

frame information (Abstract, Col.7, lines 40 – 57, and Col.8, lines 1 – 20). Wood et al. teach that this mapping step minimizes the chance of error in the subsequent cutting step (Col.8, lines 11 – 20). Therefore, it would have been obvious to one of ordinary skill in the art to incorporate the computer of Wood et al. to process the lens of Hoya Corp. with the reasonable expectation of minimizing the chance of error in the subsequent cutting step in order to produce a spectacle lens having the appropriate size to fit into an eyeglass frame as desired by Hoya Corp. Hoya Corp., Yasushi et al., and Wood et al. do not teach the marking apparatus as claimed by the applicant. However, Yasushi et al. teach that a marking apparatus is provided to print auxiliary marks (i.e., reference marks) on the lens after positioning the lens on the basis of hidden marks on the lens (Abstract and Figure 11). Logan et al. teach that a marking apparatus that is capable of marking an edging line on portion of the surface of the spectacle lens to be cut off by edging is generally used in a system for cutting lenses to the desired shape of a spectacle frame (Col.1, lines 15 – 30). It would have been obvious to one of ordinary skill in the art to incorporate the marking apparatus of Logan et al. into the lens processing system of Hoya Corp., Yasushi et al., and Wood et al. with the reasonable expectation of successfully providing a system capable of processing lenses to be cut / edged to a desired shape (i.e., the shape of the spectacle frame) as desired by Hoya Corp., Yasushi et al., and Wood et al.

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19. The combination of Hoya Corp., Yasushi et al., Wood et al., and Logan et al. also teach all the limitations of Claims 7 – 9 as set forth above in paragraph 18 and below, including a system wherein / further comprising:

- Claim 7 – The production information includes an edging mark indicating a region of the lens remaining after edging (see paragraph 18 above).
- Claim 8 – The edging line is larger than and has the same shape as the peripheral edge of an opening of the spectacle frame (see paragraphs 18, 15, and 12 above).
- Claim 9 – The production information includes reference position marks (see paragraph 20 of the previous Office Action).

20. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hoya Corp. (JP 2507643 Y2) in view of Yasushi et al. (JP 10-282459 A) in further view of Wood et al. (USPN 5,053,971) in further view of Logan et al. (USPN 4,711,035) in further view of Komatsu et al. (JP 06-191159 A).

21. The combination of Hoya Corp., Yasushi et al., Wood et al., and Logan et al. teach all the limitations of Claim 10 as set forth in paragraphs 18 – 19 above, except a system wherein the marking apparatus includes a laser irradiation apparatus. However, Komatsu et al. teach an apparatus that provides laser markings on the surface of a lens (Constitution). Komatsu et al. also teach that this apparatus performs the marking operation simply, and that the laser beams can be adjusted easily (Purpose). Therefore, it would have been obvious to one of ordinary skill in

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the art to incorporate the laser marking apparatus of Komatsu et al. into the marking apparatus of Hoya Corp., Yasushi et al., Wood et al., and Logan et al. with the reasonable expectation of successfully providing reference and edging lines / markings on the spectacle lens simply and easily as taught by Komatsu et al.

22. Applicant's arguments filed on 9/28/2001 have been fully considered but they are not persuasive.

23. Specifically, the applicant argues that neither Yasushi et al. nor Hoya Corp. teach a system comprising a computer for calculating a shape of an edging line on the basis of spectacle frame information or a marking apparatus for depicting the edging line on the surface of the spectacle lens to be cut off by edging. In response, the examiner notes that the deficiencies in the Yasushi et al. and Hoya Corp. references are taught by Wood et al. and Logan et al. It would have been obvious to one of ordinary skill in the art to combine the aforementioned references for the reasons set forth in paragraphs 18 – 20 above. As such, the applicant's claimed invention would have been obvious over the prior art of record. In summary, the applicant's arguments related to Claims 6 – 10 are moot in view of the new grounds of rejection set forth in paragraphs 18 – 20 above.

Conclusion

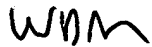
24. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Weir et al. (USPN 5,960,550) teach a device and method for marking ophthalmic lenses and molds utilizing a computer and a pen device.

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25. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).
26. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.
27. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wesley D Markham whose telephone number is (703) 308-7557. The examiner can normally be reached on Monday - Friday, 8:00 AM to 4:30 PM.
28. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive Beck can be reached on (703) 308-2333. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

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29. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



WDM

November 28, 2001

Wesley D Markham
Examiner
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SHRIVE P. BECK
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700